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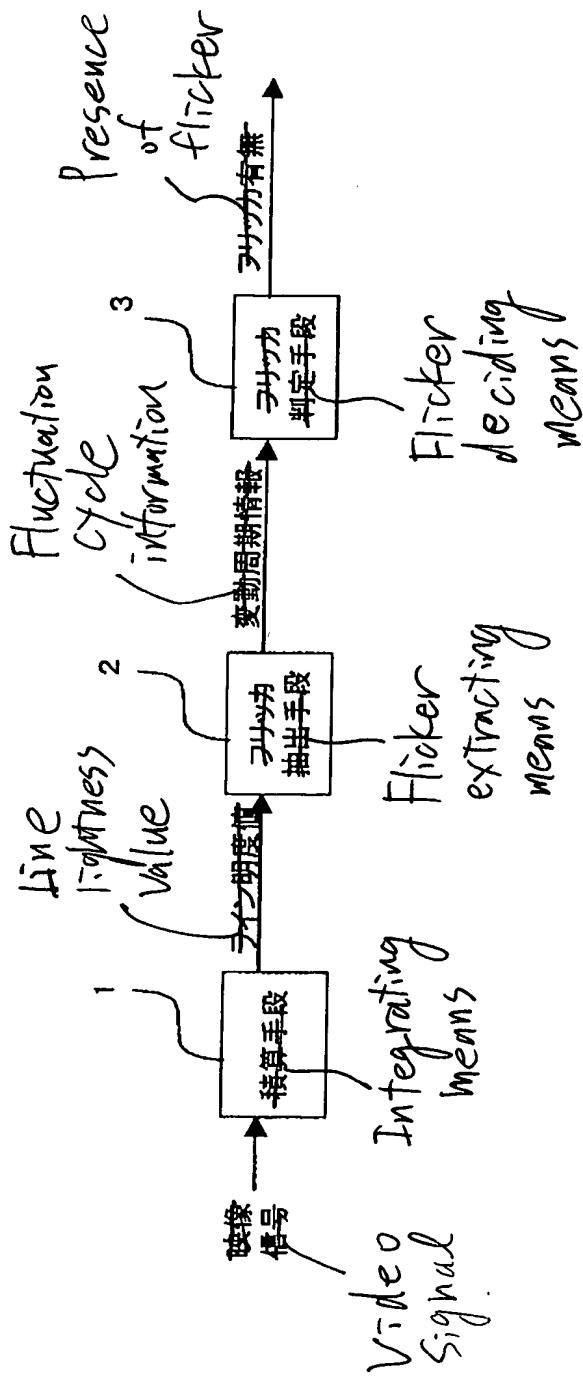


Fig. 1

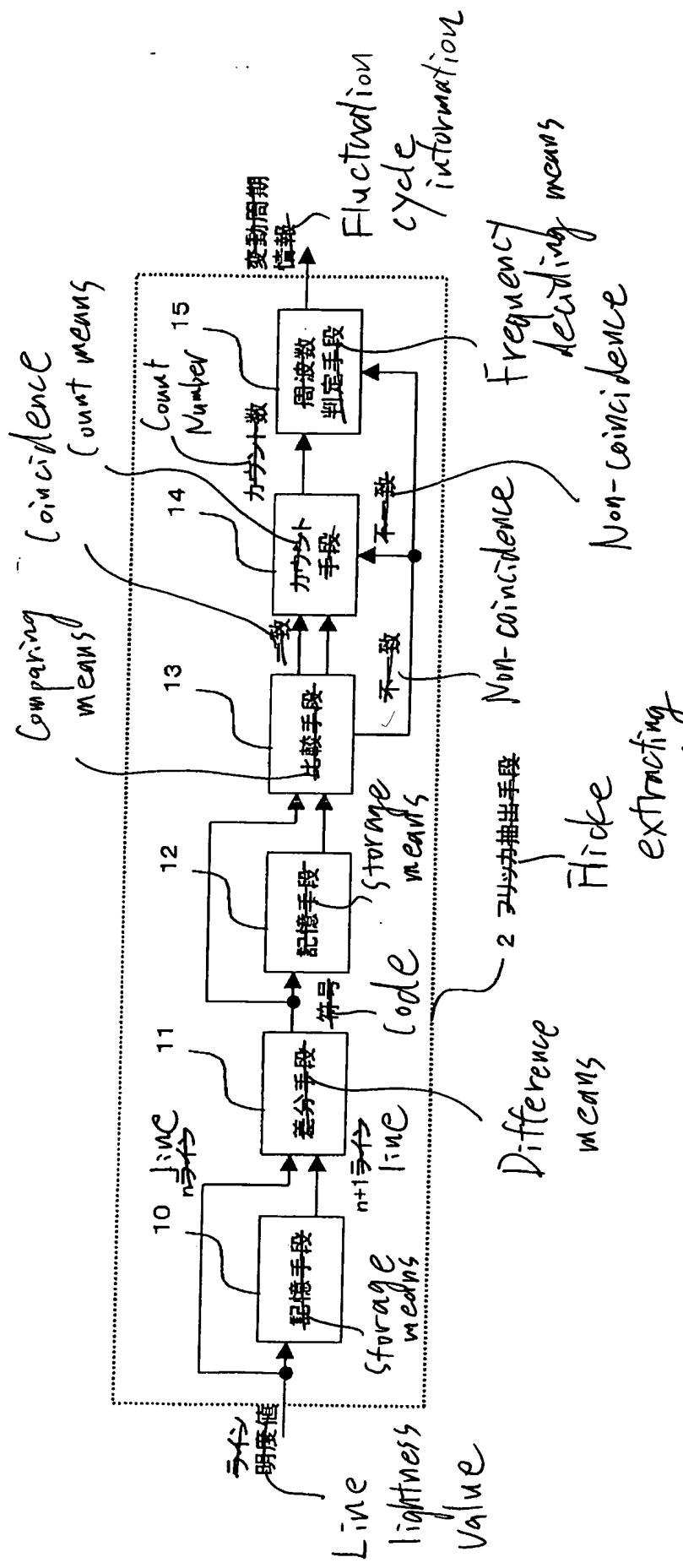
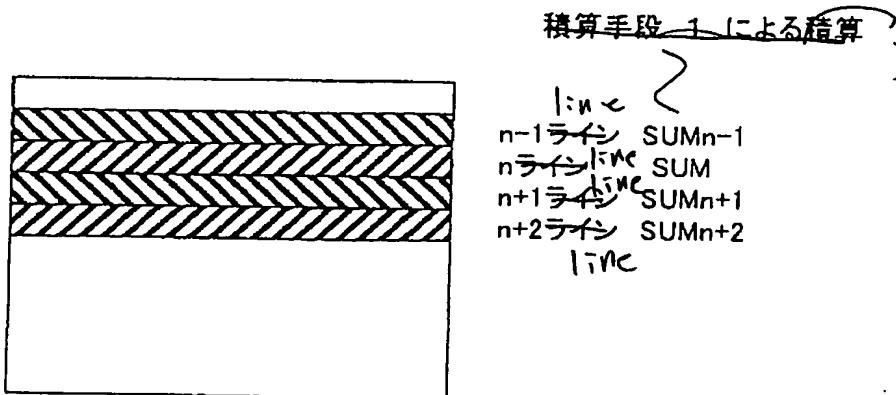


Fig. 2

Fig. 3



Integration by
integrating means

Fig. 4

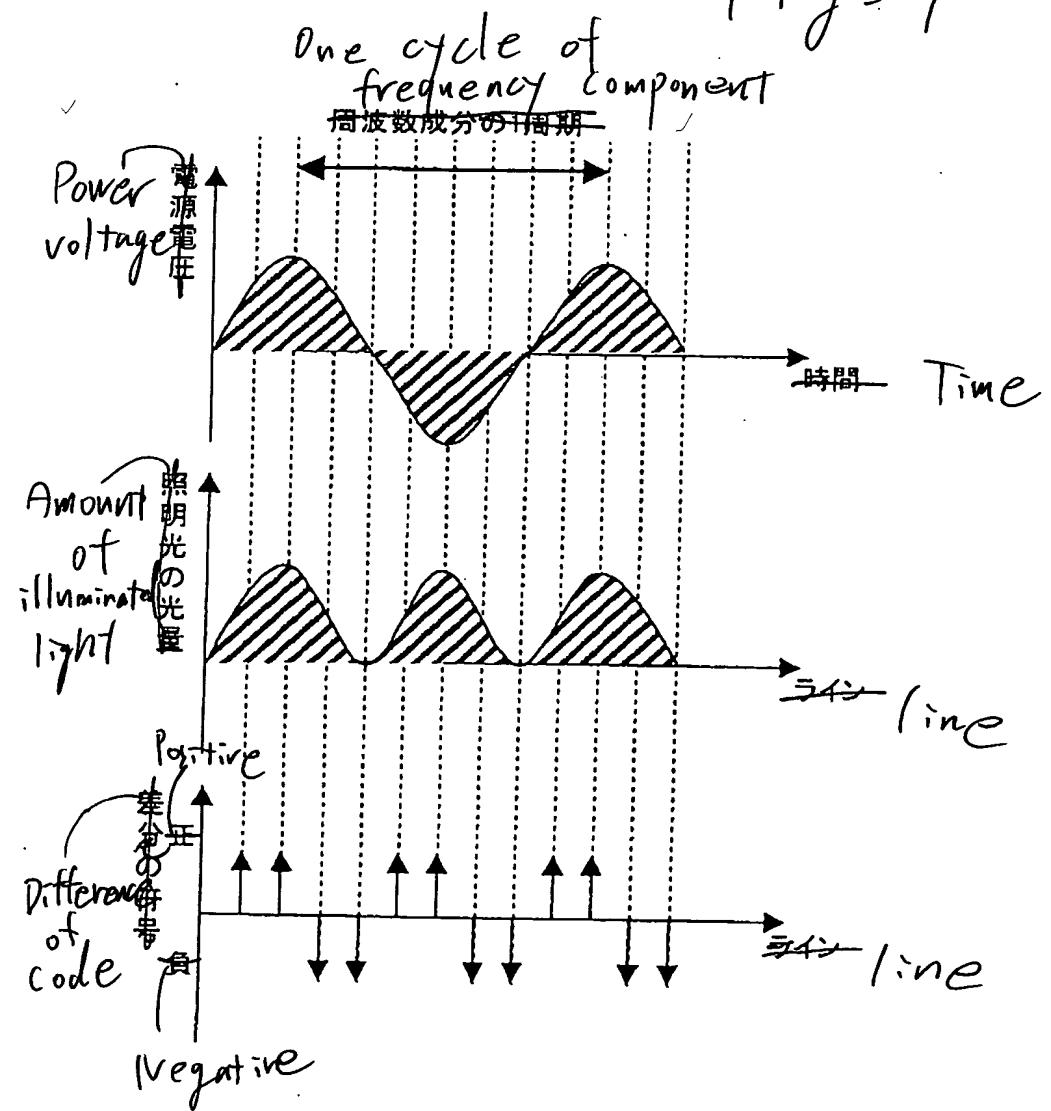
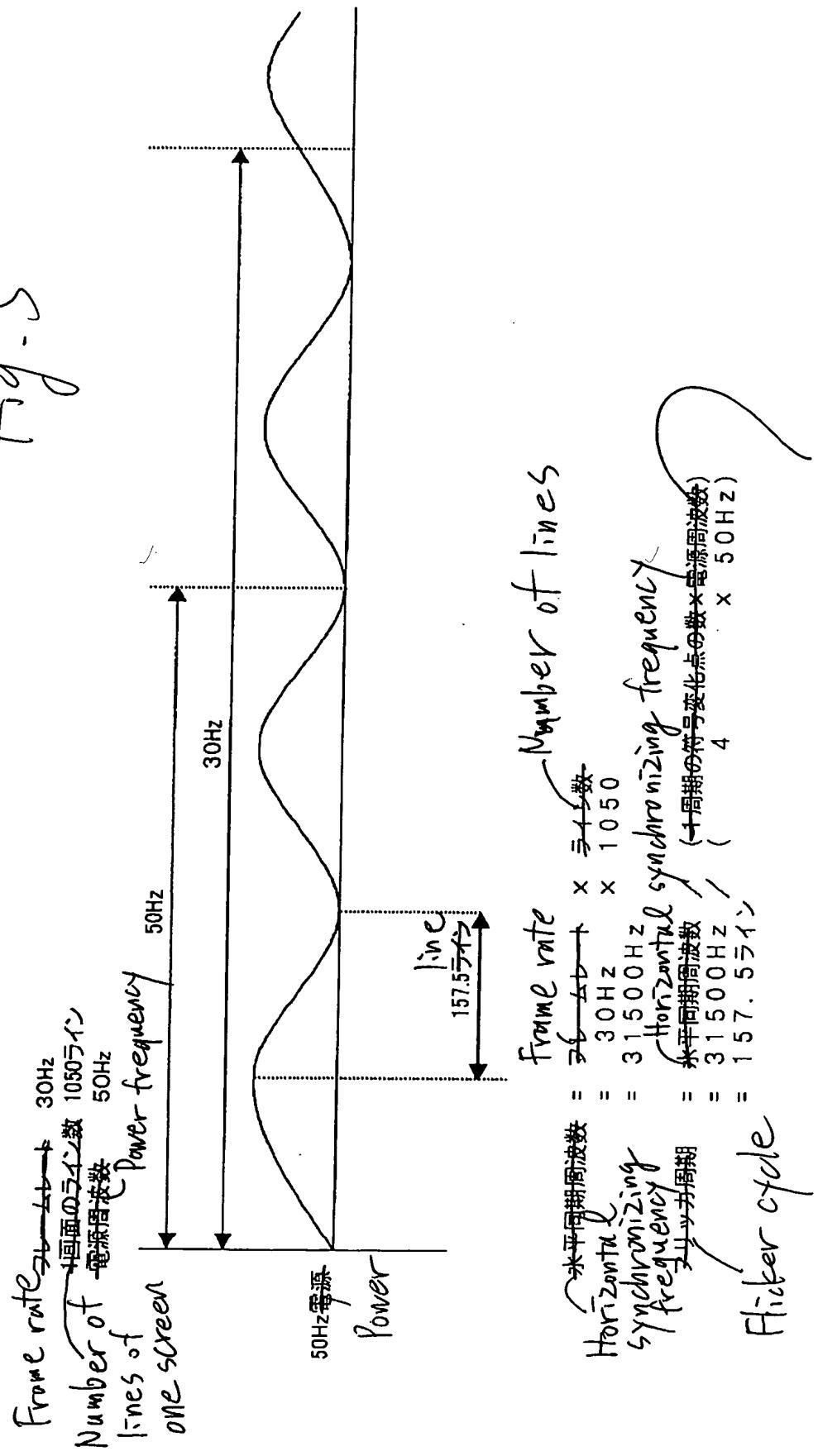


Fig. 5



$$\begin{aligned}
 \text{Horizontal synchronizing frequency} &= \frac{\text{frame rate} \times \text{Number of lines}}{\text{power frequency}} \\
 &= \frac{30 \text{ Hz} \times 1050}{50 \text{ Hz}} \\
 &= 157.5 \text{ Hz}
 \end{aligned}$$

Flicker cycle

Number of code change points for one cycle \times Power frequency

Fig. 6

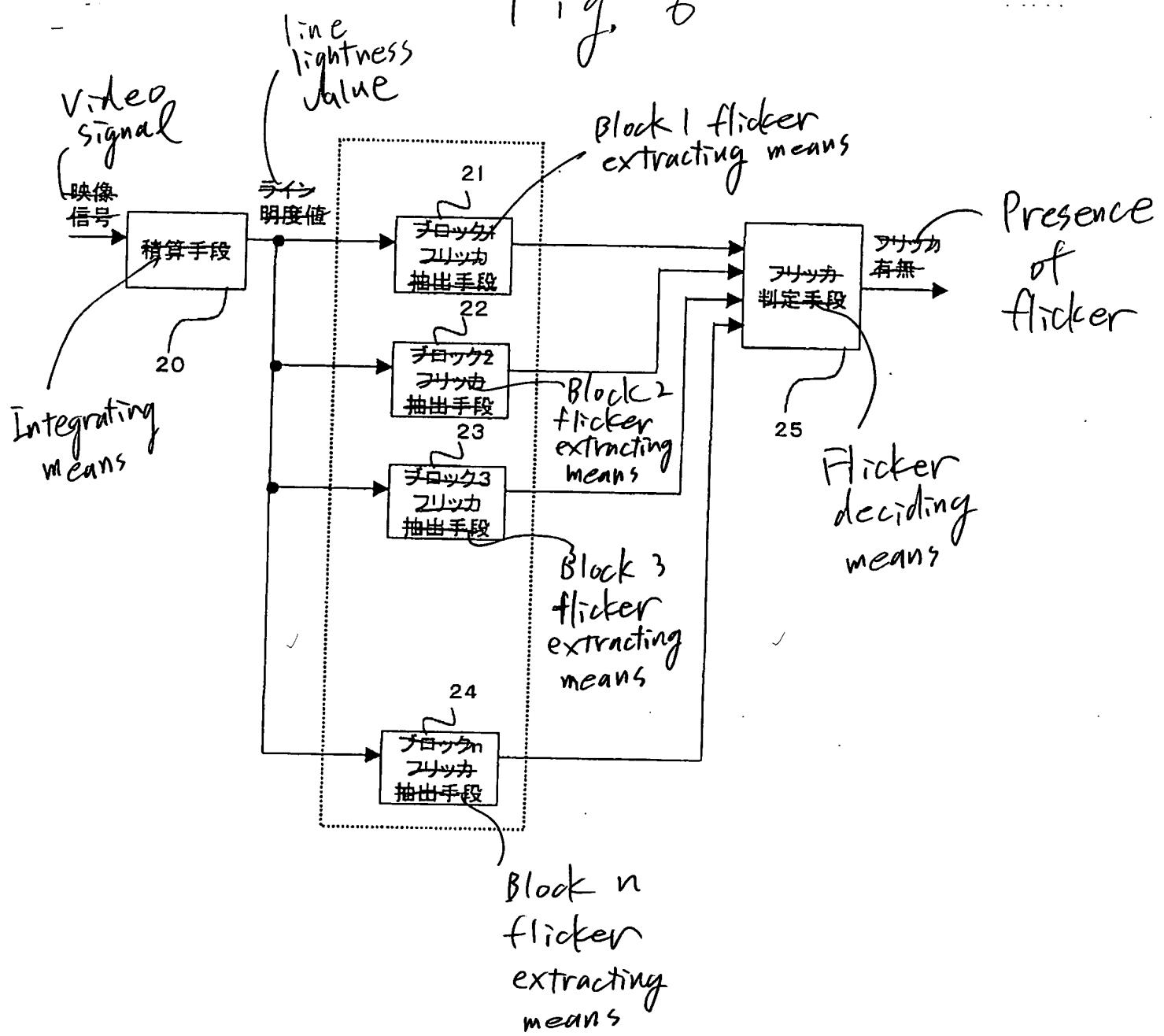
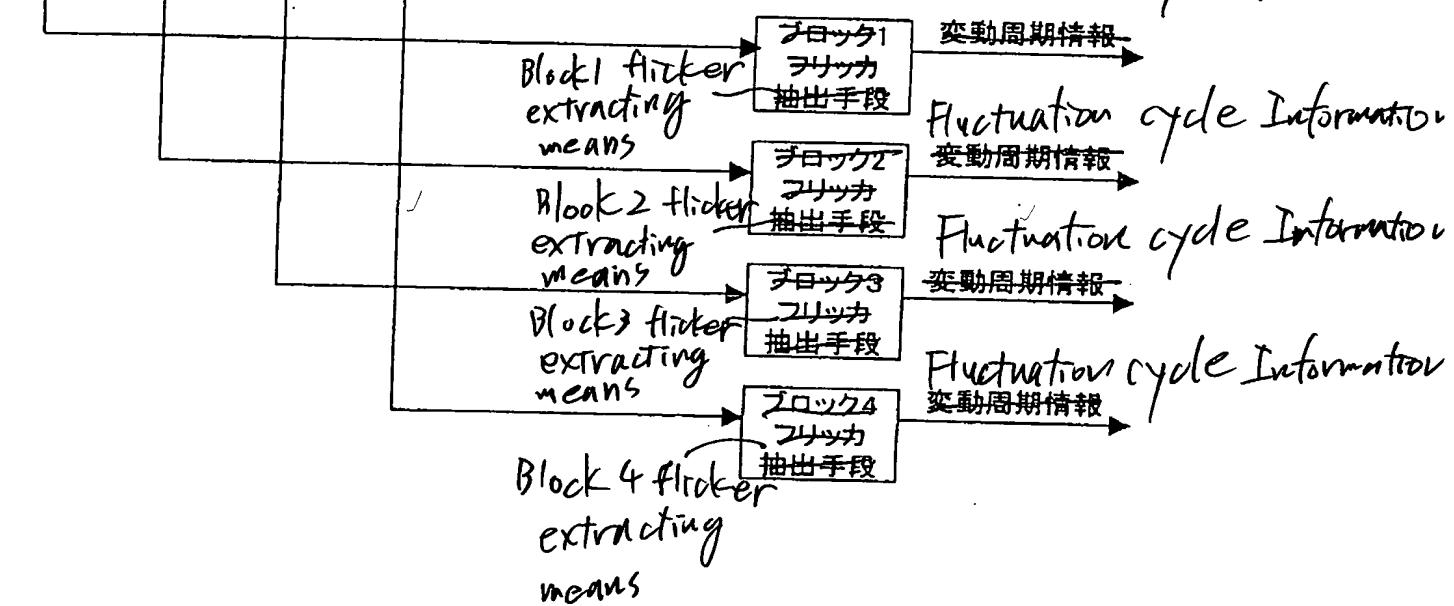
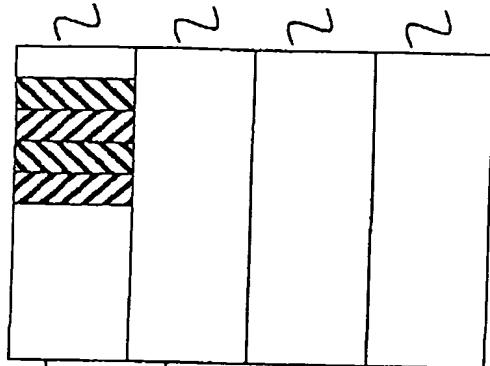
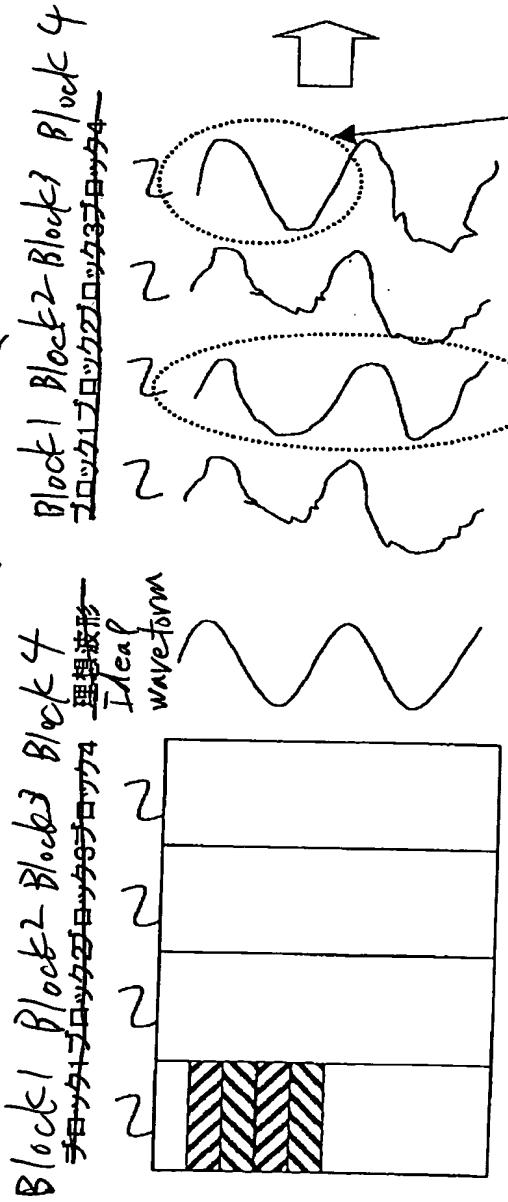
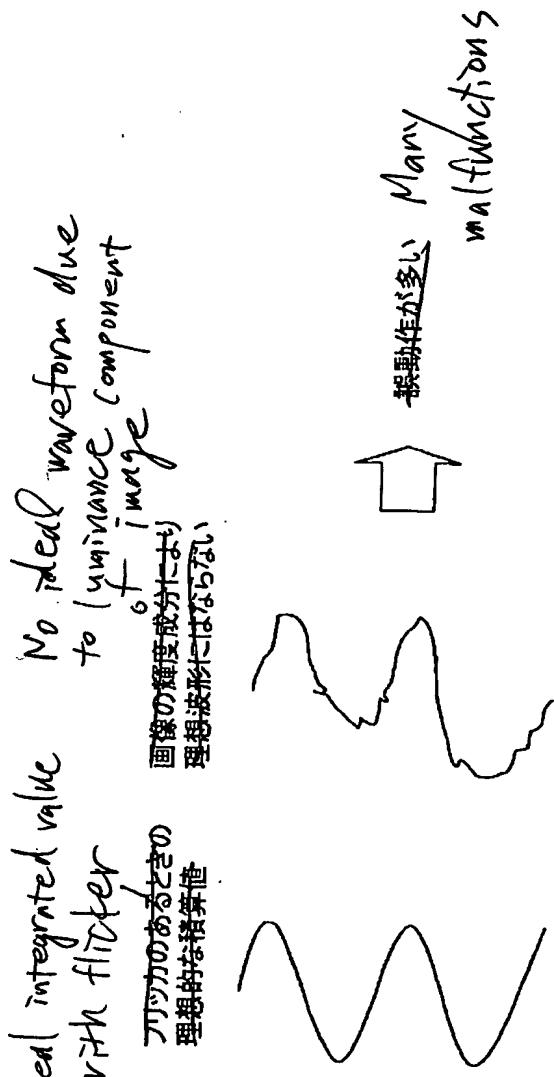
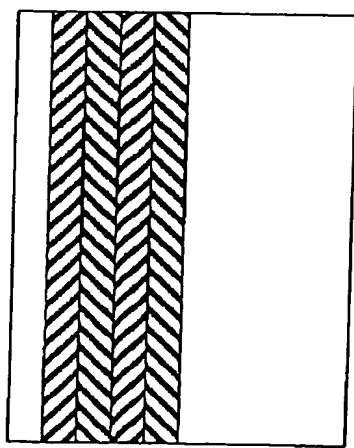


Fig. 7

Block 1 Block 2 Block 3 Block 4
ブロック1 ブロック2 ブロック3 ブロック4



Ideal integrated value
with flicker
アーチカルのあるときの
理想積分値

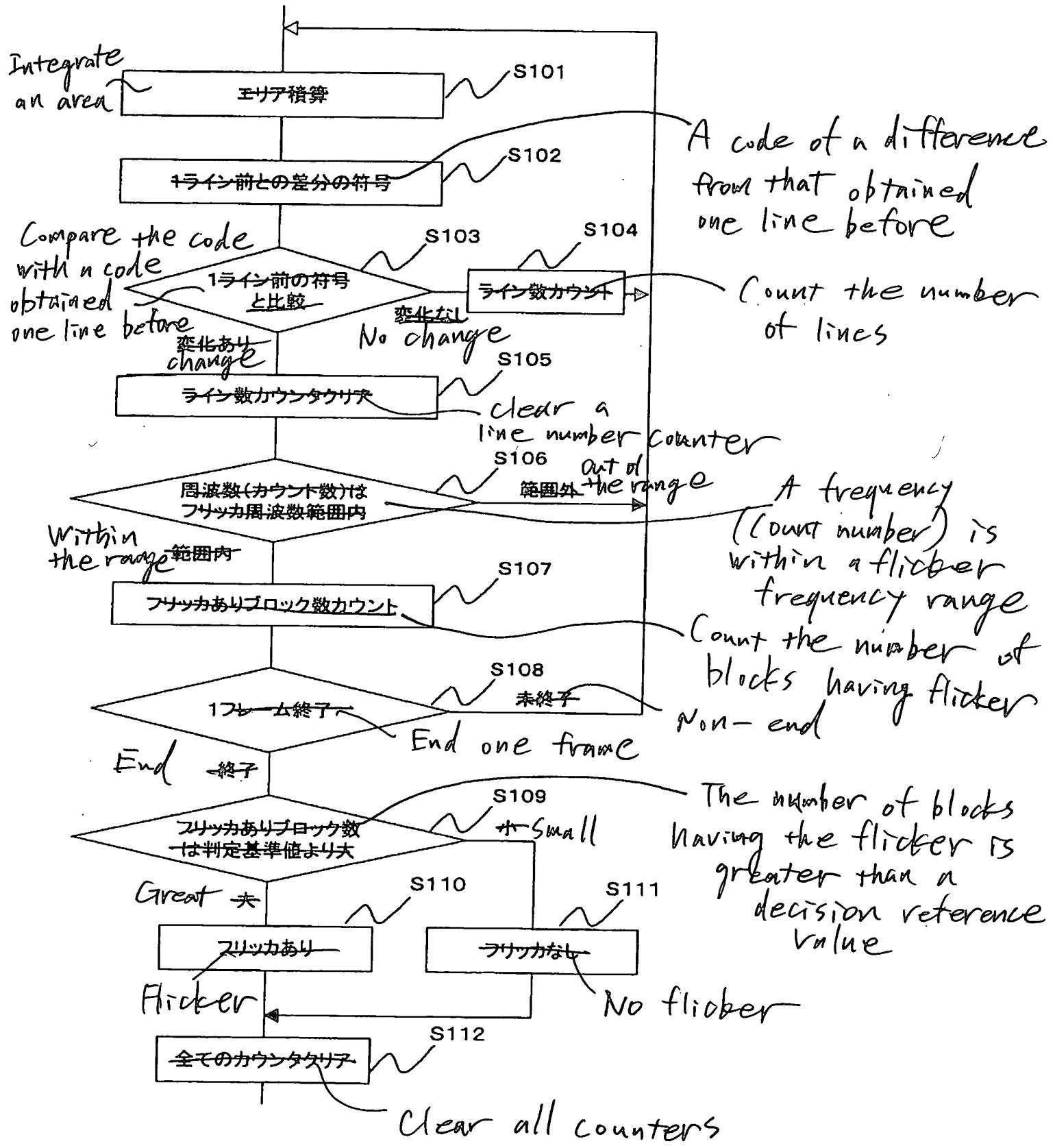


By the division of a block, a flicker
decision is made in an area having a
flat image (a small change in a
luminance component) to decrease
a malfunction.

Area having
flat image layer
画層が平坦なエリア

Fig. 8B

Fig. 9



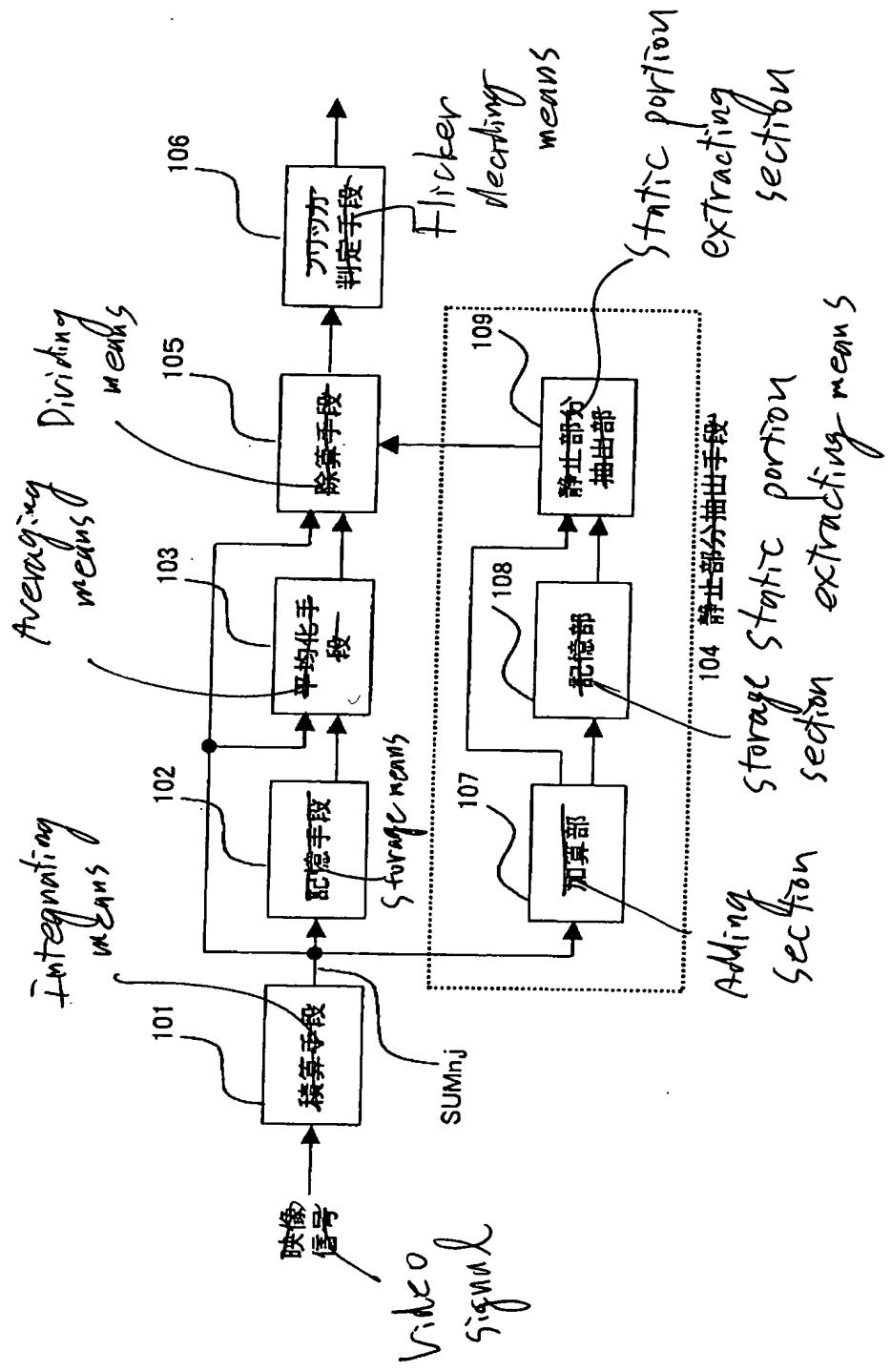
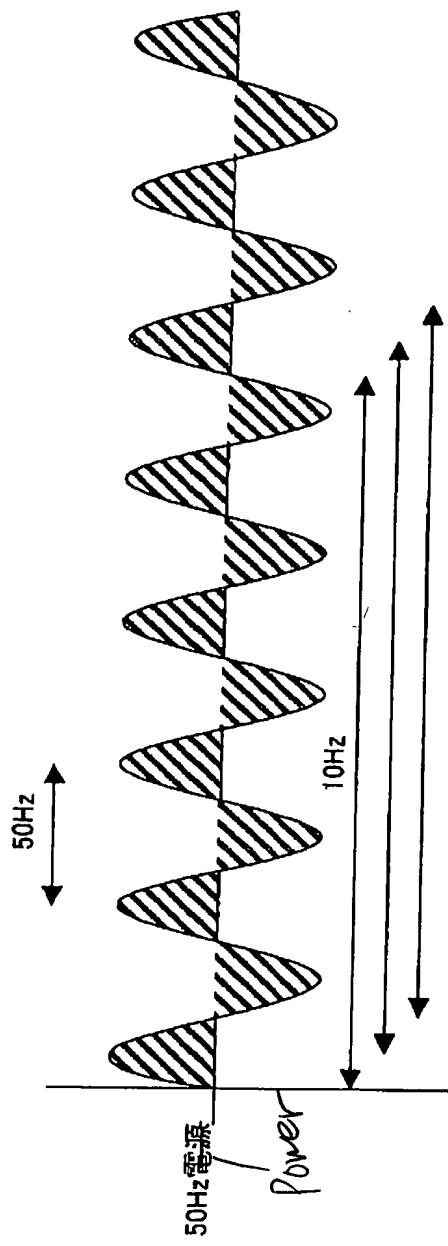


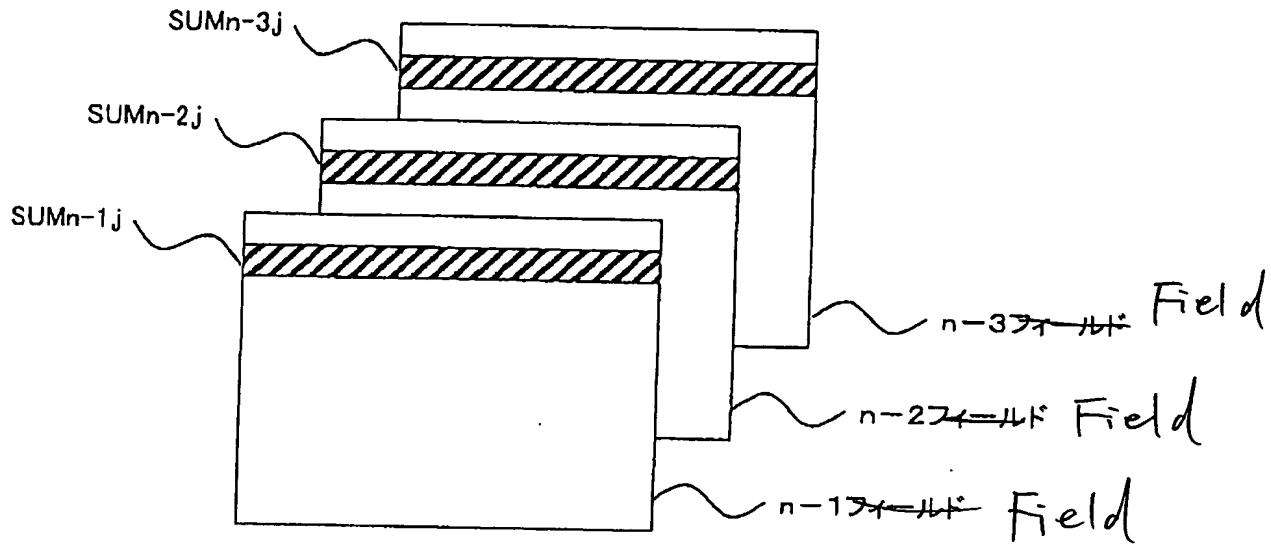
Fig. 10



In the case in which a frame rate is 30Hz at a power of 50Hz, an integration of three frames (10Hz) is equivalent irrespective of the sampling in any timing. Therefore, it is possible to remove a flicker component by the integration of three fields.

Fig. 11

Fig. 12



A signal obtained by averaging a predetermined area corresponding to a plurality of frames (three frames in a conventional example) has no flicker component.

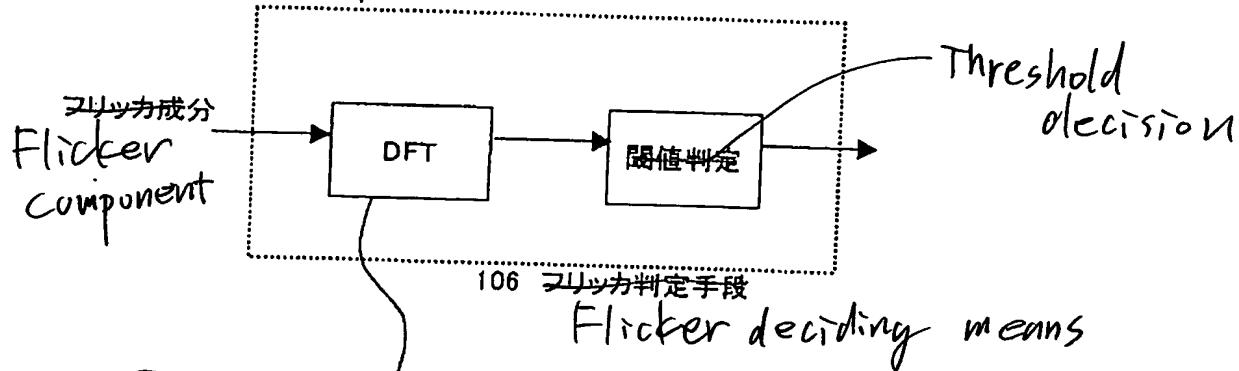
$$\text{AVER}_j = (SUM_{n-1j} + SUM_{n-2j} + SUM_{n-3j}) / 3$$

Fig. 13

Divide an integrated value in a predetermined area by an average value between frames, thereby extracting a flicker component

ノリッカ成分 = $\text{SUM}_{n-1} / \text{AVE}_{n_j}$

Flicker component



DFT
(Descrete Fourier Transform)

DFT (離散フーリエ変換) $X(w) = 1/2\pi \int x(t) e^{-iwt} dt$
または
DFT変換テーブル
or
DFT conversion table